Introduction

Soil Association Scotland welcomes the opportunity to comment on the Scottish Government’s Draft Climate Change Plan 2017-2032. We are the leading charity in Scotland working for healthy, humane and sustainable food, farming and land use, and have been actively involved in developing policies and proposals for the plan through the Agriculture and Climate Change Strategic Group. We hope our response provides helpful answers to the four questions posed by the consultation in relation to the Land Use sector.

We commend the Scottish Government for setting new and ambitious emission reduction targets for tackling climate change in light of achieving Scotland’s world-leading target six years earlier than anticipated and the historic UN Paris Agreement. We are pleased that many of the policies and proposals which we advocated and supported have been incorporated in the draft plan.

We especially welcome agriculture policies and proposals that encourage farmers and land managers to adopt organic and agroecological practices which reduce GHG emissions: minimise use of synthetic fertilisers; focus on good soil and nutrient management; re-use on-farm resources; use legumes and green manures; encourage animal health planning and high welfare standards; promote agroforestry; create, enhance and connect wildlife habitats; and actions to restore and protect important carbon stores.

While we have made good progress in reducing GHG emissions, much more needs to be done if we are to meet the new targets, especially from the ‘hard to reduce’ agriculture sector. We need a step change in how we produce food and manage land, with an urgent move to more sustainable practices that significantly reduce emissions, and re-build and protect Scotland’s natural capital and ecosystem services which have been in decline for the last 60 years: agricultural intensification, simplification of the countryside, habitat destruction and climate change are principal drivers behind the decline.

We recognise and understand the challenge the Scottish Government faces in achieving the proposed agriculture policy outcomes in the plan. Making these outcomes happen will require clear, practical, and achievable actions. Our response to Q2 maps out the actions that can be implemented to make these outcomes a reality.

An important part of our work is delivery of the evidence-based Future Farming Scotland programme, which is delivered in partnership with industry bodies, NGOs and NDPBs. Future Farming Scotland works with farmers, crofters, land managers, agricultural and environmental experts and researchers to share and build practical skills and knowledge, and drive innovation for productive and profitable low input,
low carbon, and nature-friendly farming and land use in a changing climate. Future Farming Scotland has provided us with invaluable insight into the challenges, and the practical actions which we believe are most likely to succeed in effecting the plan’s policy outcomes.

Q1. Progress to date in cutting emissions and implementing proposals and policies set out in the RPP2

Agriculture is recognised by the Committee on Climate Change as a hard to reduce sector, with Scotland having a higher share of emissions than the rest of the UK as a whole. Consequently, we acknowledge that reducing emissions from the sector has been a huge and necessary task, which will require a range of policy levers (including mandatory) going forward to maximise the uptake of measures that will help achieve the plan’s policy outcomes.

Q2. Scale of reductions proposed and appropriateness and effectiveness for meeting targets

Land Use - Agriculture

Policy outcome 1: Farmers, crofters, land managers and other primary food producers are aware of the benefits and practicalities of cost-effective climate mitigation measures.

Information and advice on climate change mitigation should continue and be strengthened. There is an opportunity to further professionalise agriculture by rewarding farmer engagement with these continuing professional development opportunities. The policies that provide these opportunities are: information and advice, an agri-tech group, and Climate Change Young Farming Champions. Incentivising engagement with these could be done through the successor to the current Rural Development Programme: by improving access to funding (i.e. event attendance leads to a higher scoring application for a capital item like a slurry store); or as a minimum requirement for the receipt of payments from an agri-environmental scheme. In addition, climate change mitigation practices should be integral to all knowledge transfer and advisory, with messaging on mitigation measures included as a requirement for all programmes.

Sustainable practices that mitigate GHG emissions should sit within the teaching of all modules of the Further Education and Higher Education land management courses, rather than as separate and distinct modules or courses. Future farmers, crofters, land managers, and other primary food producers should consider GHG mitigation as a fundamental part of land management.

The Scottish Government should continue to promote and support organic farming – which is a guarantee of low-carbon farming and production, recognised as a sustainable production system that is good for the environment, good for producers, recognised by consumers, and thanks to the rigorous auditing by organic certification
bodies requires no new framework or quality assurance mechanism. The proposal of introducing a low carbon marketing scheme may not be helpful for consumers, as many are already overwhelmed by food labelling.

Policy outcome 2: Emissions from nitrogen fertiliser will have fallen through a combination of improved understanding, reduced application and better soil

We welcome the policy of developing a science-based target for reducing emissions from nitrogen fertiliser. The creation of a nitrogen budget for Scotland could be used to inform this. The evidence from this can give policy makers a sense of how much nitrogen fertiliser is used and how efficient this use is. It could be used to inform and strengthen advisory, research, and policy, and so improve the financial and environmental efficiency of Scottish farmers. It is important that production systems and local climate are considered before policies are made based on the results of the nitrogen budget.

Soil testing should be made a compulsory requirement for all Region 1 land within a period of 6 years for the receipt of agricultural production support. Coordinating this requirement with effective advise will increase the efficiency of Scottish agriculture in a sustainable way. Soil, and its organic matter, are fundamental resources for Scotland and must be safeguarded. Analysing soil is an essential first step toward effective decision-making at local and national levels.

Supporting organic farming, and increasing the area of land farmed organically, will therefore immediately deliver the proposal for the inclusion of leguminous crops in a rotation, provided that leguminous crops include forage legumes such as clover. It is a requirement in organic farming systems to have a fertility building stage (using legumes, usually clover) within an arable rotation. We would not support a mandatory requirement to grow grain legumes (pulse crops such as peas and beans) as northerly areas in Scotland are too climatically constrained to successfully grow these.

Policy outcome 3: Work with Quality Meat Scotland and others to reduce emissions from red meat and dairy through improved emissions intensity

We support this outcome by working in partnership with Quality Meat Scotland to deliver Future Farming Scotland knowledge transfer events for farmers aimed at improving on-farm management practices. This includes a nationwide programme of soil management events for building and maintaining healthy grassland soils which support better plant growth, increase animal productivity and reduce GHG emissions.

Policy outcome 4: Emissions from the use and storage of manure and slurry will have been reduced

Incentivising the use of machinery with low GHG emission application methods through a zero interest loan scheme for machinery rings will enable investment in
modern spreading technology that reduce emissions. This technology includes trailing shoes and slurry injection. Livestock manures can help replace synthetic fertilisers, but they do have the potential to emit GHGs. Application method is essential to reduce this, and the right type of machinery is vital.

Capital funding should be made available for slurry storage. Application timing of livestock manures is also essential to reduce GHG emissions, and adequate storage (6 months storage capacity with a cover) is vital to reduce GHG emissions.

Supporting organic farming, and increasing the area of land farmed organically, will immediately deliver the proposal for the inclusion of livestock grazing in rotation on current arable land. It is a requirement in organic farming systems to have a fertility building stage (that includes legumes, usually clover as part of a grass and clover ley) within an arable rotation. This fertility building ley phase is best utilised by grazing livestock, and nearly all organic farms in Scotland are mixed farming systems with grazing livestock and arable crops.

Policy outcome 5: The carbon content of soil and agricultural land will have improved through carbon sequestration and expanded woodland/forestry and hedgerows

Enhanced financial measures, combined with effective knowledge transfer, can be used to increase the planting of trees which optimise carbon sequestration. Soil Association Scotland believes that agroforestry has the potential to be a win-win for land managers in Scotland and the climate. As well as sequestering carbon it can diversify farm income, shelter livestock, improve biodiversity and amenity value, and protect soils. Agroforestry remains a minority land use in Scotland, and there are few examples of how it can fit well with existing farming systems. Planting trees and hedgerows on farms are a long-term investment and more farmers need to be convinced of the farming, economic and climate change benefits.

We would like to see a less restrictive SRDP Forestry Grant Scheme agroforestry option. Current funding is only available for relatively small areas within a very narrowly defined type of land that can only be used for sheep grazing. We would also like to see clarification around funding, with the assurance that land managers will not lose current and future funding through the Basic Payment Scheme should they access funding through the current FGS agroforestry option. This will help achieve the proposal of a woodland cover target for agricultural land.

Increasing the availability of funding must be done in conjunction with building knowledge and skills. Based on our own experience of working with farmers and agroforestry experts, we believe there is significant potential to increase the practice in Scotland, including silvopasture in mixed and upland areas as well as silvoarable systems in arable areas. Over the last 12 months we have held four highly popular Future Farming Scotland agroforestry and woodland events across Scotland, attended by over 100 farmers and land managers. The establishment of an agroforestry Operational Group could investigate and promote the commercial
opportunities and feasibility of establishing agroforestry systems and networks in Scotland.

We support the proposal of payments for carbon sequestration. As well as mitigating GHG emissions, mineral soils with a higher organic matter (and therefore carbon) content are a more productive asset for farm businesses. Soil Association Scotland want to see soil organic matter (SOM) increase by 20% in 20 years. Seven Ways to Save Scotland’s Soils sets out recommended actions to create healthy, productive and resilient soils. This target is most relevant to degraded arable soils, and we welcome any measures to increase carbon sequestration, as this would also increase soil quality. If compulsory soil testing was used as a means of delivering policy outcome 2, then some additional testing for soil organic matter could be considered as a mechanism of measuring SOM in Scotland’s arable soils.

Agriculture - further considerations

Organic certification provides quality assurance and accreditation, ensuring that producers take actions to mitigate GHG emissions in a way that is inexpensive for government to both administer and audit. Organic farming is a legally defined production system: to sell or supply organic produce, farmers must be certified by a relevant body (e.g. Soil Association Certification). This body checks that producers meet a rigorous set of standards, several of which mitigate GHG emissions (e.g. not using ammonium nitrate). Several proposals within the draft plan promote practices that are requirements of organic farming systems. These practices have been independently identified as key GHG mitigation measures.

We would like to see the Scottish Government promote the Organic Action Plan as a policy within the climate change plan. The Scottish Government has committed to support the growth of organic farming (a SRDP National Priority) through Organic Ambitions: Scottish Organic Action Plan 2016-2020 which has been developed by industry in close cooperation with the government. Supporting this will help achieve policy outcome 2, as well as provide other benefits that include encouraging biodiversity, protecting air and water, improving soils, reducing antibiotic usage in livestock systems, and adding further economic value to the Scottish Food and Drink Sector.

In order to support the step change required to significantly reduce GHG emissions we need a transition to a fairer and equitable support system which:

- Incentivises productive and sustainable food production and land use.
- Pays for the public goods that the market will not support e.g. peatland restoration.
- Rewards farmers and land managers for their continued professional development.

Farm businesses want to produce food profitably for stable markets: creating and sustaining demand for food that is climate-friendly, healthy, nutritious and produced
as locally as possible to high ethical, environmental and animal welfare standards is therefore a vital policy driver. Food’s post farm-gate GHG emissions account for around 50% of its total carbon footprint from production to consumption.

A policy framework must also be in place to ensure that all parts of the food supply chain go towards achieving policy outcomes across all of the Climate Change Plan sectors including residential, waste and transport as well as agriculture. Critically, the plan should also be mutually supportive of and reinforce other key Scottish Government policies and strategies including those for land use, climate adaptation, organic farming, biodiversity, forestry and peatlands; and on the consumption side policies and strategies for low carbon behaviour, sustainable public procurement and ‘Good Food Nation’.

Land Use – Peatlands

We welcome the new targets and funding for peatland restoration, which can deliver huge carbon sequestration and wider environmental and economic benefits. We are currently working with Scottish Water and RSPB Scotland to develop actions which will raise awareness and understanding amongst farmers and land owners of the benefits of peatland restoration and conservation. To make the policies stronger and ensure the targets are met (and potentially achieve earlier / exceed the targets) we suggest that:

• The Peatland Code should be more widely promoted and encouraged as a way to attract additional (private) funding for peatland restoration and conservation work.

• The possibility of creating a peatland carbon offset-setting scheme (similar to Woodland Carbon Code) should be explored.

• The Peatland Action initiative - a tried and tested successful delivery mechanism is reinstated.

• Measures are in place and enforced to ensure that landowners do not allow damage to peatland habitats that would otherwise offset the benefits of restoration work.

Land Use - Forestry

We welcome the policies and proposals to increase the rate of creating sustainable woodlands and use of sustainable wood fibre in downstream industries, and will continue to work with Forestry Commission Scotland and other partners to achieve the policy outcomes. Soil Association Certification is accredited to certify Forest Management (FM) and Chain of Custody (CoC) to FSC® and PEFC™ standards, and offers verification and validation of projects for the Woodland Carbon Code. In Scotland, this includes 8 FM certificates for 211,500 hectares of woodland (15% of Scotland’s total forest and woodland cover) and CoC certificates for 2 Scottish based businesses a further 5 for multi-sites with Scottish locations using wood fibre.
Q3. Appropriateness of timescales over which the proposals and policies expected to take effect

We welcome the combination of a longer term vision with shorter term detail on specific policies used in this plan. A broad vision is important to see where we need to go, with regular and shorter term consideration of the policy levers that can be used to get there. A big step change is required for the agricultural sector to mitigate GHG emissions however this has the potential to be destructive if it is implemented very rapidly without time for adaptation. A careful balance must be struck between having the vision to make that change and move away from the status quo, and the potential harm that can be done to the industry. Gathering of evidence, and encouraging cultural and behavioural change, will be essential to ensure that this is a success.

Q4. Extent to which proposals and policies reflect considerations about behaviour change and opportunities to secure wider benefits

Scottish people have one of the worst diet-related health records in the developed world. Scotland’s farmers should be producing more climate-friendly, healthy and nutritious food (local, fresh, seasonal and produced with fewer inputs) and more of Scotland’s citizens should be eating it with public procurement bodies including schools, hospitals and care homes leading the way. Shorter, fairer and greener food chains also keep more money in the local economy, create more local jobs and help local producers receive more of the final price.

Contacts

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References